

U.S.S.N. 10/605,487

6

81044205 (FGT 1864 PA)

REMARKS

In the Non-Final Office Action of December 22, 2004, claims 1-20 are pending. Claims 1, 16, and 20 are independent claims, which all other claims depend therefrom. Claims 1, 16-18, and 20 are herein amended.

Claim 16 stands rejected under 35 U.S.C. 102(b) as being anticipated by Farmer et al. (U.S. Patent No. 6,198,998).

Amended claim 16 recites a method of performing sensing system operations within a vehicle. The method includes the limitations of monitoring multiple separate non-adjacent viewing areas via a non-multi conduit transmission medium. Object detection signals are generated from a single vision sensor corresponding to the separate non-adjacent viewing areas.

The claimed method monitors multiple separate viewing areas, such as an area exterior to a vehicle, a surface area on a vehicle, and an area interior to a vehicle. The method monitors the viewing areas via a non-multi conduit transmission medium and a single vision sensor. In so doing, the claimed invention minimizes the number of components utilized to perform such monitoring.

Farmer discloses an occupant position detection system. The system of Farmer utilizes a single wide-angle lens to simultaneously monitor a front passenger area of a vehicle including both the front driver and passenger seats. The lens of Farmer has a wide perspective field of view to monitor a large interior area of the vehicle.

Applicants submit that Farmer fails to teach or suggest the monitoring of multiple separate non-adjacent viewing areas, as claimed. The system of Farmer monitors a single viewing area, which includes the front driver and passenger seats. For argument sake, even if one considers the driver seat and the passenger seat as two front interior areas, these areas are not separate and are adjacent. However, such consideration is inappropriate since simultaneous monitoring of a perspective field of view is stated in col. 4, lines 40-44, of Farmer and clearly refers to a single area.

U.S.S.N. 10/605,487

7

81044205 (FGT 1864 PA)

In order for a reference to anticipate a claim the reference must teach or suggest each and every element of that claim, see MPEP 2131 and *Verdegrad Bros. V. Union Oil Co. of California*, 814 F.2d 628. Thus, since Farmer fails to teach or suggest each and every element of claim 16, claim 16 is novel, nonobvious, and is in a condition for allowance.

Claims 1-2 and 10-13 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Farmer in view of Gorenflo et al. (U.S. Patent No. 5,699,448).

Amended claim 1 recites a multipurpose sensing system for a vehicle. The system includes an optic that is directed at and non-fiber optically monitors multiple separate non-adjacent viewing areas. A single vision sensor is coupled to the optic and generates multiple object detection signals that correspond to the separate non-adjacent viewing areas. The system in monitoring multiple separate non-adjacent viewing areas via an optic and a single vision sensor also simplifies complexity of vehicle sensing systems.

As stated above, Farmer fails to teach or suggest the monitoring of multiple viewing areas and thus also fails to teach or suggest the monitoring of multiple separate and non-adjacent viewing areas.

Gorenflo discloses an apparatus for monitoring multiple components for circuit board installation. The apparatus is utilized to monitor the position and orientation of the components prior to installation on a circuit board. A controller reorients the components when out of position for proper installation. The apparatus includes the use of multiple fiber optic conduits, each of which directed at a different component.

Applicants submit that neither Farmer nor Gorenflo teach or suggest the use of an optic that is directed at and non-fiber optically monitors multiple separate non-adjacent viewing areas. Farmer monitors a single viewing area and Gorenflo monitors multiple components via multiple fiber optic conduits. The combination of Farmer and Gorenflo would not allow one to arrive at the present invention without some modifications thereof, which would not have been obvious to one skilled in the art. The claimed invention monitors multiple areas

U.S.S.N. 10/605,487

8

81044205 (FGT 1864 PA)

without the use of multiple fiber optic conduits. Referring to MPEP 2144.04, note that the omission of an element and the retention of its function is an indicia of unobviousness, see *In re Edge*, 359 F.2d 896, 149 USPQ 556 (CCPA 1966).

Referring to MPEP 706.02(j) and 2143, to establish a *prima facie* case of obviousness the prior art reference(s) must teach or suggest all the claim limitations, see *In re Vaack*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). Thus, Applicants submit that Farmer and Gorenflo fail to teach or suggest each and every limitation of claim 1, therefore claim 1 is novel, nonobvious, and is in a condition for allowance. Also, since claims 2 and 10-13 depend from claim 1, they are also novel, nonobvious, and are in a condition for allowance for at least the same reasons.

In addition, Applicants submit that Gorenflo is nonanalogous art. Referring to MPEP 2141.01(a), while the Patent Office classification of references and cross-references in the official search notes are some evidence of "nonanalogy" or "analogy" respectively, the court has found "the similarities and differences in structure and function of the inventions to carry far greater weight." *In re Ellis*, 476 F.2d 1370, 1372, 177USPQ526, 527 (CCPA 1973). Gorenflo would not have logically commended itself to an inventor's attention in considering the problems solved by the system of claim 1. In developing a multipurpose sensing system for a vehicle, one would clearly not look to an apparatus for monitoring components to be installed on a circuit board. Gorenflo is directed to the monitoring and adjusting of the orientation of components prior to circuit board installation. Gorenflo is not directed to and as a result fails to teach or suggest the monitoring of multiple areas exterior to, on, or interior to a vehicle. Although Gorenflo monitors multiple components, Gorenflo does not monitor multiple areas associated with a vehicle environment. The apparatus of Gorenflo is unrelated to that of the claimed invention. The apparatus of Gorenflo would not have logically presented itself to one of skill in the art in solving the problems associated with vehicle sensing systems. Gorenflo would not be reasonably pertinent to the particular problems solved by the system of claim 1

U.S.S.N. 10/605,487

9

81044205 (FGT 1864 PA)

and for that matter the method and system of claims 16 and 20. Thus, the Applicants submit that Gorenflo is nonanalogous art.

Referring to MPEP § 2143.01, the fact that references can be combined or modified is not sufficient to establish *prima facie* obviousness; the prior art must also suggest the desirability of the combination and the modification. *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990). None of the references suggest such combination and clearly none of the references suggest performing some sort of combination and modification thereof as required to arrive at the system of claim 1.

Claims 17-19 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Farmer in view of Roberts et al. (U.S. Pub. No. 2002/0024713)

Applicants submit that since claims 17-19 depend from claim 16, they are also novel, nonobvious, and are in a condition for allowance for at least the same reasons as put forth above with respect to claim 16.

Claims 3-9, 14-15, and 20 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Farmer in view of Gorenflo and further in view of Roberts.

Applicants submit that since claims 3-9 and 14-15 depend from claim 1, they are also novel, nonobvious, and are in a condition for allowance for at least the same reasons as put forth above with respect to claim 1.

Claim 20 recites a multipurpose sensing system for a vehicle. The system includes the limitations of a multi-focal lens having a first focal point corresponding to a first viewing area and a second focal point corresponding to a second viewing area.

The Office Action states that Farmer and Gorenflo do not mention a sensing system that includes a second focal point. Applicants agree. Applicants further submit that none of the of the relied upon references teach or suggest any of the stated limitations of a multi-focal lens having a first focal point corresponding to a first viewing area and a second focal point corresponding to a second viewing area.

U.S.S.N. 10/605,487

10

81044205 (FGT 1864 PA)

Farmer discloses the use of a single lens. In review of the specification of Farmer, it appears that the lens of Farmer has a single focal point. The lens of Farmer is convex, monitors a single area, has a single perspective view, and thus has a single focal point.

Gorenflo discloses a lens coupled to multiple fiber optic conduits. The lens receives light from each of the conduits. The lens of Gorenflo is also convex and appears to have a single focal point.

Roberts discloses a rearview mirror assembly that has multiple photo sensors. Roberts discloses the use of multiple lenses 133 and 168. Lens 133 is convex and has a single focal point. Lens 168 is a plano lens and thus does not have a focal point. As a result, neither lens of Roberts has multiple focal points.

Thus, none of the references teach or suggest the use of a multi-focal or multi-focal point lens, therefore, none of the references teach or suggest the use of a multi-focal lens having a first focal point corresponding to a first viewing area and a second focal point corresponding to a second viewing area. Since Farmer, Gorenflo, and Roberts alone or in combination fail to teach or suggest each and every element of claim 20, claim 20 is also novel, nonobvious, and is in a condition for allowance.

U.S.S.N. 10/605,487

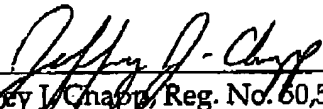
11

81044205 (FGT 1864 PA)

In light of the amendments and remarks, Applicants submit that all the rejections are now overcome. The Applicants have added no new matter to the application by these amendments. The application is now in condition for allowance and expeditious notice thereof is earnestly solicited. Should the Examiner have any questions or comments, the Examiner is respectfully requested to call the undersigned attorney.

Respectfully submitted,

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